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Information Technology for Youth (IT4Youth) In Rural Communities in the West Bank USAID Cooperative Agreement # 294-A-00-00-00070-00

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Abbreviations

COP	Chief of Party	MPH	Multipurpose Hall
DIP	Detailed Implementation Plan	NIS	New Israeli Shekels
EVT	Evaluation Team	OAR	Open Access Room
FGD	Focus Group Discussion	QSR	Quarterly Status Report
FK	Future Kids	PCA	Palestinian Communication Agency
HHS	Household Survey	PCBS	Palestinian Central Bureau of Statistics
IR	Intermediate Results	PMC	Program Management Committee
IT	Information Technology	РМО	Program Management Organization
IT4Youth	Information Technology for Youth	PRA	Participatory Rapid Appraisal
IYF	International Youth Foundation	QSR	Quarterly Status Report
JCSC	Joint Community Services Council	RITC	Regional Information Technology Center
MC	Management Committee	USAID	United States Agency for International Development
MEHE	Ministry of Education and Higher Education	WA	Welfare Association
MOLG	Ministry of Local Government	YSC	Youth Steering Committee
MOU	Memorandum of Understanding	•	

1. Overview of the IT4Youth Program. This report presents an overall assessment of the performance of the IT4Youth program. The program, developed in partnership by the International Youth Foundation (IYF) and the Welfare Association (WA), was funded by USAID (cooperative agreement #: 294-A-00-000-00000).

The IT4Youth program worked with local partners to assist schools and community organizations in a selected cluster of villages in the northern region of the West Bank to provide access to and training in computer-based IT for youth. It was designed to promote IT use in the community for education, work, and recreation to enhance the learning skills and employability of youth aged 10-24 from the cluster villages, leading to a better quality of life.

The program originally targeted around 7,000 rural students and youth, 50 teachers, and several hundred parents and adult community members in a cluster of eight villages and three hamlets (population 30,000) in adjoining areas of Nablus and Jenin districts: in Jenin, the villages of Silet ad-Dhahr, Jaba, Fandaqomiya and al-Attara and the hamlet of Al Assaa'ssa; and in Nablus, the villages of Burqa, Bizariya, Beit Imrin, Sebastiya and the hamlets of Nisf Jbeil and Ijnisinya. The program actually reached 5,980 students who received training in the original 14 schools and another 11,261 students in 30 new schools located in surrounding villages in the target region.

Implemented during the period 29 September 2000—31 July 2004, the Program cooperated with a wide range of local institutions including: the MEHE, MOLG, local village councils, schools, FK Center, training institutions, and the youth Center in Silet ad-Dhahr. The Program reached youth through two mechanisms:

School-based Program:

- 1. Constructing/renovating computer labs in 14 secondary schools;
- 2. Providing computers, lab equipment and software to secondary school computer labs:
- 3. Training IT teachers, engineers, and staff at the directorates of the Ministry of Education and Higher Education (MEHE) in Jenin and Nablus;
- 4. Training non-IT teachers:
- 5. Training male and female students (grades 8, 9, 10) in various information technology (IT) skills:
- 6. Developing and implementing IT curricula for students at secondary schools; and
- 7. Linking 14 schools to the Internet.

Community-based Program:

- 1. Constructing a Regional IT Center (RITC) at Silet ad-Dhahr, Jenin:
- 2. Providing computers, lab equipment and software to the RITC:
- 3. Developing non-formal vocational training curricula:
- 4. Training male and female youth trainers in various IT skills:
- 5. Training male and female young people (ages 10-24) in various IT skills:
- 6. Providing a recreational space for creative computer use by rural youth, ages 10-24;

- 7. Training Joint Community Service Councils (JCSC), Youth Steering Committee (YSC) and Mentors in management of IT4Youth program.
- 8. Building awareness of parents and community members on the contribution of IT to the learning skills and employability of young people.

The IT4Youth Program was managed by the Program Management Council (PMC), comprised of three members from IYF and three from WA in addition to the Chief of Party (COP) and head of the external Evaluation Team (EVT) as non voting members.

The PMC met four times a year to (a) review progress; (b) consider issues raised by staff; (c) provide any needed guidance to the project team; (d) review the quarterly and annual reports prior to submission to USAID and discuss financial and programmatic issues raised in any reports; (e) hire and manage the Chief of Party; (f) ensure sufficient funds are available to the program; (g) make policy decisions.

The PMC approved quarterly progress reports and annual reports for submission to USAID, as well as the annual Detailed Implementation Plan and Budget and key personnel. It also submitted to USAID requests for budget re-allocation, project enhancement and project expansion.

The implementation of the program was carried out by the Program Management Organization (PMO). Program staff consists of a COP, three sector coordinators, a financial controller, a secretary and a field officer. In addition, the RITC was staffed with a manager, an administrative assistant and a messenger/ cleaner. At the community level, program implementation and supervision was carried out by the Joint Community Services Committee (JCSC), consisting of one representative of each local village council for a total of eleven members. The JCSC assumed a supervisory role on program implementation; and a youth steering committee (YSC) and a number of mentors, both selected from members of the RITC, supported the implementation of RITC activities and promoted the program at the community level.

The IT4Youth Program was evaluated by a team consisting of two locally-based external evaluators, IYF's Regional Program Director for the Middle East and Africa and IYF's Director of Technical Support Services. The team planned and established a system for evaluating indicators based on the annual indicators submitted in the evaluation plan; worked with IT4Youth staff to develop reporting formats and information; made field visits with project staff to check on progress and talk with community leaders, various program beneficiaries and school and government staff; and carried out studies to assess the performance and impact of the program. In addition, the evaluation team provided training and technical assistance to staff and partners in the monitoring of the project performance and data generation from the field.

2. Program Context. The IT4Youth was implemented under extremely difficult conditions. On 29 September 2000, the first planned day for launching the IT4Youth program, the Palestinian second Intifada started. Since that day, the Palestinian

territories witnessed an unprecedented and steady increase in violence, isolation and a massive destruction of the Palestinian economic infrastructure.

According to a recent report of the World Bank¹,: "...between September 2000 and late 2002, the Palestinian economy experienced one of the deepest recessions in modern history. The decline in real per capita GDP reached almost 40% by the end of 2002, exceeding the scale of economic losses suffered by the US in the Great Depression², or Argentina during the recent financial collapse³. Unemployment increased from 10% of the workforce to an average of 41% during 2002 and the number of the poor rose from 20% to over 50% of the population. In Gaza unemployment exceeded 46% of the workforce and the poverty level rose to 68%."

Data of the Palestinian Central Bureau of Statistics (PCBS) showed an alarming increase in poverty rates. Poverty has increased from 20.3% in 1998 to around three-forth of the population in 2002. In 2001 poverty in refugee camps reached 75.1%, 65.4% in rural area and 54.7% in urban areas.⁴

The closure of the Palestinian areas, the restriction on movement of people and goods have disrupted the daily life of the Palestinian people and affected their social and economic activities. Not only have regions been isolated from one another but also every town and village was disconnected by Israeli checkpoints. Mobility of people and goods became extremely difficult, expensive and time consuming. Many towns and villages were placed under 24-hour curfews for extended periods of time.

According to IUED, 66% of the respondents indicated that it was "difficult", "very difficult", "almost impossible" for them or their family members to go to their work and 84% of parents in the West Bank reported that as a result of Israeli closures, curfews and military actions, it became more difficult for their children to reach their schools and universities.

During the period 1 February 2002 and 31 March 2003, the IT4Youth program documents showed that 150 days of closures, curfews or mobility restrictions that affected the implementation of the program. The districts of Jenin and Nablus, in which the IT4Youth program is located, were particularly targeted by the Israeli military actions. Program villages have frequently been isolated or were subject to repeated incursions of the Israeli army.

The political and economic crisis had direct effects on young people. It is hard to estimate the psychological effects of the on-going violence on young people that lived

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¹ The World Bank, Disengagement, the Palestinian Economy and Settlements, 2004, P1

² GDP losses during 1929-1933 in the US around 25-27%

³ The GDP per capita declined in 1998-2002 by 28%

⁴ www.pcbs.org

IUED, Graduate Institute of Development Studies, University of Geneva, Report V: Palestinian Public Perceptions on Their Living Conditions-The Role of International and Local Aid during the Second Intifada, (December 2002), p. 97

their entire life under extremely difficult situation. In addition, according to PCBS, unemployment is highest among youth 15-24 years of age⁶.

With the weak capacity of the Palestinian economy to generate sufficient employment opportunities, it became extremely difficult for young people to find jobs due to their inadequate skills and qualifications and limited work and market experience.

All of these factors negatively influenced the implementation of the IT4Youth Program, especially that the program utilized a high level of hands-on work and required a high level of mobility of staff. It is worth noting that all the assumptions underlying the program plans were not operative since the beginning. Those include:

- That people and goods will be able to move with relative ease to and within the West Bank;
- ♦ That unemployment and poverty will not rise significantly above June 2000 levels;
- ◆ That public sector institutions will be able to finance the intended services as planned;
- That there will be no political obstacles hindering the continuance of the program.

In addition, given the situation outlined above, it became difficult for project partners and participants to fulfill their roles and responsibilities in the program, which was also an operating assumption.

3. Situation Analysis of the Program Villages. In order to put the results of the end of program evaluation in its larger context the following section will provide background information about some selected socioeconomic indicators in the villages in which the IT4Youth program was implemented, with particular focus on the situation of youth.

Demographic characteristics. The population of the village cluster is estimated to be 30,000 persons. HHS3 showed that 63% of the population of the target villages are 24 years or younger. This highlights the significance of the youth population in the target villages.

According to HHS3, the average household size in the program villages was 6.5 persons (6.8 persons in Jenin villages and 6.0 persons in Nablus villages). This is slightly higher than the average household size in rural areas in Jenin and Nablus (5.9 persons)⁷. Those results show that youth in the program villages live in large families.

Labor Force participation. Table 1 shows that around 31% of the population in the cluster village is in labor force with a clear disparity between male

⁷ PCBS, National Census, 1997.

⁶ PCBS, Labor Force Survey during the forth quarter – 2003.

participation (57.6%) and female participants (4.7%). The table also shows a positive correlation between age and participation in the labor force.

Table 1: Labor force participants 10 years and above in the villages targeted by the IT4Youth program (2002-2004)

Characteristics	In Labor F	огсе	•	Outside La	bor Force	-
	HHS 2002	HHS 2003	HHS 2004	HHS 2002	HHS 2003	HHS 2004
Age group						
10-14	0.2	0	0.2	99.8	100	99.8
15-17	9.5	7	7.1	90.5	53	92.9
18-24	36	31.8	32.4	64	68.2	67.6
25-34	53.1	55.3	54.2	46.9	44.7	45.8
35-44	55.3	54.5	54.4	44.7	45.5	56.6
45-54	51.3	56.5	53.3	48.7	45.5	46.7
55+	26.2	29.6	30.3	73.8	70.4	69.7
Total	32.2	31.4	31.1	67.8	6R.6	68.9
Sex						
Male	57.6	56	55.5	42.4	44	44.5
Female	4.7	4.4	4.7	95.3	95.6	95.3
Total	32.2	31.4	31.1	67.8	68.6	68.9
District					_	
Jenin	31.4	31.6	30.3	68.6	68.4	69.7
Nablus	33.5	31.2	32.3	66.5	68.8	67.7
Total	32.2	31.4	31.1	67.8	68.6	68.9

Table 2 shows a high level of unemployment in the cluster village (44.5% in 2002, 51.1% in 2003 and 39.1% in 2004). Unemployment was higher in Jenin than in Nablus.

Table 2: Employment status of labor force participants 10 years and above in the villages targeted by the IT4Youth program according to age and sex (2002-2004)

Characteristics	Employed			Unemployed		
	HHS 2002	HHS 2003	HHS 2004	HHS 2002	HHS 2003	HHS 2004
Age group					r a	
10-14	78	•	-	22	-	-
15-17	59.6	37.6	61.9	40.4	62.4	38.1
18-24	46	34.5	57.2	54	65.5	42.8
25-34	59.5	50.8	65.1	40.5	49.2	34.9
35-44	60.1	61.7	69.1	39.9	38.3	30.9
45-54	53.3	46.9	57.2	46.7	53.1	42.8
55-	46.6	40.7	38.6	51.4	59.3	61.4
Total	55.5	48.9	60.9	44.5	51.1	39.1
District					,	
Jenin	54.7	44.8	54.9	45.3	55.2	45.1
Nablus	56.7	54.9	69.1	43.3	45.1	30.9
Total	55.5	48.9	60.9	44.5	51.1	39.1

According to figure 1, employment was directly proportional to years of education. It is worth noting that as a result of the closure of the Israeli borders since the beginning of the second Intifada, the vast majority of skilled and unskilled laborers lost their jobs, leaving

the weak Palestinian economy with limited capacity to employ them. It is also important to note that the largest employment sector in the Palestinian territories is the social/services sector which requires staff members with high levels of education.

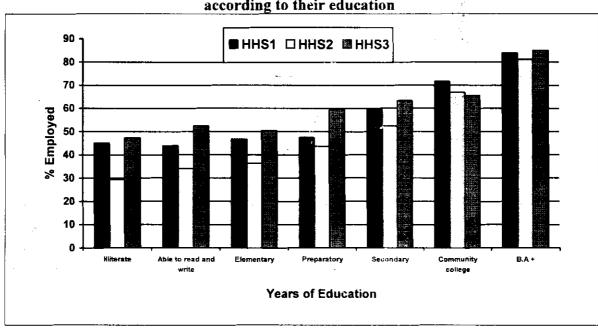
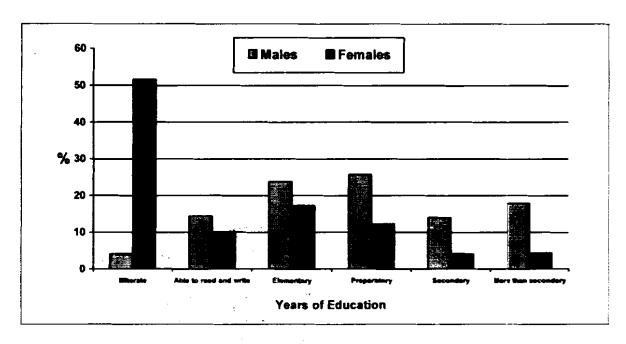


Figure 1: Distribution of employed persons 10+ years in the program villages according to their education

Education/Illiteracy. Illiteracy level in the cluster village seems to be lower than the average for Jenin and Nablus districts. The illiteracy rate among persons 10 years and above in Jenin and Nablus according to the national census of 1997 was 20%. HHS3 showed that illiteracy rate among persons 10 years and above was 2.2% of males and 12.4% of females.

Around 6% of the households are headed by females with a clear disparity in the level of education between male and female heads of households. For example, 51.7% of female heads of households are illiterate (4.1% for males) and 17.9% of males and 4.4% of female heads of households completed higher education.

Figure 2: Distribution of heads of households according to their sex and education, 2004



Situation of Youth 10-24 Years. Young people 10-24 years comprise around 37% of the population. The level of literacy among this category of the population is very high. Only 0.9% of youth 10-24 years and 1.2% of female youth are illiterate. According to table 3, around three-forth of young people aged 10-24 years are students.

Table 3: Distribution of youth 10-24 in the cluster village according to sex and school attendance, 2004

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	Students			•	Not students	ats
	2002	2003	2004	2002	2003	2004
Male	78.6	75.4	74.3	21.4	24.6	25.7
Female	66.6	73.6	75.6	33.4	26.4	24.4
Average	72.5	74.5	74.9	27.5	25.5	25.1

Table 4 shows that around 13% of young people 10-24 years are in abor force and that participation in labor force increases by age.

Table 4: Distribution of youth 10-24 in the village cluster according to labor force

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Age		In labor forc	e	Oı	itside labor fo	rce
	2002	2003	2004	2002	2003	2004
10-14	0.2	0	0.3	99.8	100	99.7
15-17	9.5	7	6.8	90.5	93	93.2
18-22	31.8	27.4	31.2	68.2	72.6	68.8
23-24	50.4	44.4	44.1	49.6	55.6	55.9
Total	14.8	12.8	13.3	85.2	87.2	86.7

4. Summary of Results. The following section on the next page summarizes the comparison of the results of the end of project evaluation against planned outputs and outcomes.

Planned Outputs	Outputs Achieved	Narrative					
	School Based Component						
Construction/renovation of computer labs in 14 secondary schools	Computer labs were constructed/renovated in 14 secondary schools. Computers were installed in 30 other schools. Total number of schools with computers: 44.	1. Development of and IT infrastructure. The program constructed/renovated 14 school labs and established a regional IT Center in Silet ad-Dhahr. School labs were provided with 21 computers and other IT equipment (e.g., a scanner, a printer, a server, a network, etc.). In addition, each school was provided with a computer and a printer for school administration use.					
		IT teachers highlighted the importance of having sufficient advanced computers and other IT equipment in their schools on improving the quality of teaching. In addition, in many schools five students share the same old computer in comparison with the IT4Youth schools where an average of 2.5 students share an advanced computer. IT teachers indicated that the availability of Class Net was very useful to both students and teachers. Students share their products with others and the teacher is able to control the teaching process.					
		Note: out of a total of 1,244 schools managed by the MEHE, around 600 schools have computer labs which have an average of 6-10 computers (most of them are antiquated). ⁸					
		Towards the end of the program, all computers in schools and RITC were replaced (294 computers). Computers from the original 14 schools were given to 30 new schools in Jenin and Nablus districts.					
		Schools in 10 out of 11 villages were connected to internet through the Netphone services.					

⁸ Interview with the Assistant Director of the Training Directorate, MEHE.

Planned Outputs	Outputs Achieved	Narrative
•	Scho	ol Based Component
Construction/renovation of computer labs in 14 secondary schools		2. School IT equipment functional. An important component of the IT4Youth program was the development of a system to maintain computers and other IT equipment. Conversations with IT teachers who worked in other schools indicated that the availability of maintenance services represented an important strength in the IT4Youth program. In other schools maintenance is very slow and the number of training days lost due to the damage of computers is very high.
	;	Field data and direct observation confirm the important role of the routine monthly maintenance in solving software and some hardware problems. Maintenance policy, procedures and logging forms were developed and used by IT teachers on regular basis.
		During the last 10 days of every month, the IT field coordinator visited schools to carry out routine checking and assessment of all computers, based on a checklist. Software problems were solved and damaged computers were taken and sent to vendors to solve emerging computer problems.
		It should be highlighted that the arrangement for hardware maintenance was complicated and time consuming because the vendor was based in Ramallah, and moving computers to Ramallah for repair was a difficult task in light of the continued closures of the Palestinian territories.

Planned Outputs	Outputs Achieved	Narrative			
School Based Component					
Construction/renovation of computer labs in 14 secondary schools		During the visits of the evaluation team to schools in April 2004, it was realized that the slow process in repairing hardware problems has very serious implications on the teaching process. In some labs, 4 computers were not functional because the computers or monitors that were sent for repair a few months before had not been repaired yet. This highlighted the need for a more effective and efficient maintenence strategy. When the computers were replaced, the maintenance issue was taken into account. A more effective maintenance agreement with the supplier was realized. According to the new agreement, the vendor will be responsible for proving on-site maintenance of equipment. This should improve the situation during the school year 2004/2005.			
		In addition, it has been realized that the low voltage, unstable power supply and frequent electricity cuts in some of the villages were behind many of computer damages. Furthermore, The installed UPSs' could not handle the load due to the increase from the original design from 13 to 21 computers in each school lab. The IT4Youth addressed this problem by installing new UPSs in all labs and 4 voltage regulators were installed in the villages that suffer from low voltage and unstable power supply.			
		The IT4Youth has made a strategic investment to resolve the maintenance problem. An advanced maintenance-training course was organized for IT teachers and engineers of the MEHE to enable them to carry out simple and routine maintenance of computers.			
		This step has contributed to increasing self reliance in schools especially in light of the continued closure of the Palestinian territories and the inability of computer technicians to reach schools on regular basis. In addition, this step would contribute to the technical sustainability of the program when it phases out.			

Planned Outputs	Outputs Achieved	Narrative
	School Based Co	omponent
7,000 secondary students with access to classroom training in IT each year	An average of 5,980 students had access to classroom training in IT (4,500 students in the target schools and 1,480 students attending classes from schools in nearby villages).	It should be noted that the original output established at 7,000 secondary students with access to classroom training in IT was an over estimate. After initiating the program, IT4Youth staff found out that the total student population in all the 14 target schools was only around 4,500 students. The IT4Youth program only targeted students in grades 8, 9, and 10 (total number of students was around 2,200 annually).
	During the final year, an additional 11,261 students in 30 schools also received expanded access to computers and IT training.	Nevertheless, field data showed that all students of the 14 targeted schools benefited directly or indirectly from the computer labs (i.e. students in grades 11 and 12 and those under grade 7). In addition, 1,480 students tracked from schools in nearby villages also used the computer labs.
	Total number of students with access to computers and training: 17,241.	During the final year, the original computers (294 computers) originally used in the 14 schools were later installed in 30 new schools serving a total of 11,261 students.
25 IT teachers with increased computer knowledge and skills over the four year grant period	30 IT teachers with increased computer knowledge and skills.	The number includes 14 IT teachers currently working at the program's 14 schools and 11 teachers who were replaced, plus 3 MEHE computer supervisors and 2 heads of IT departments of the MEHE.
19 computer lab maintenance personnel with increased computer knowledge and skills over the four year grant period	20 computer lab maintenance personnel with increased computer knowledge and skills.	The number includes four maintenance staff of the MEHE and 16 IT teachers who act as lab supervisors) over the four year grant period
50 non-IT teachers with increased computer knowledge and skills over the four year grant period	280 non-IT teachers with increased computer knowledge and skills over the four year grant period	The number of non-IT teachers was underestimated. There is high interest on the part of non-IT teachers to become computer literate.

Planned Outputs	Outputs Achieved	Narrative
	Community Based	
Construction of a Regional IT Center in Silet ad-Dhahr	Construction of a Regional IT Center in Silet ad Dhahr completed	The RITC was built in Silet ad-Dhahr. The RITC included a multipurpose room, an open access room, an audiovisual room, a cafeteria and an office. The Center was provided with around 30 advanced computers and other IT equipment (a scanner, printers, a server, a network, a copy machine, audiovisual equipment, etc.).
150 youth ages 16-24 using the Regional IT Center for vocational training	A total of 57 youth benefited from the vocational training program including 39 female youth that graduated from three secretary courses and 18 male students that graduated from two A+ courses (computer maintenance courses)	The implementation of the vocational training courses took place during the last two quarters of the program period. The delay in constructing the facility and the subsequent delay in initiating the vocational training program made it impossible to reach the target number of youth.
10 RITC staff and volunteers with increased computer knowledge and skills	3 RITC staff and 11 youth steering committee members and mentors participated in 2 computer courses	
11 Joint Community Services Committee members with increased computer knowledge and skills	All 11 members of the JCSC participated in basic computer training courses.	Two basic computer courses were given.
17 Management Committee members with increased computer knowledge and skills	16 Management Committee members with increased computer knowledge and skills.	The Management Committee was replaced with the Youth Steering Committee and the mentors.
12 municipal staff with increased computer knowledge and skills	10 municipal staff received in-service training on computer usage.	
300 adult community residents with increased computer knowledge and skills	Around 180 adults participated in formal computer training courses. 422 adult, youth and community members were introduced to computer knowledge and skills.	Target was not reached due to construction delays of the RITC and closures.

⁹ Includes community residents under the age of 18 during the "soft opening" period.

5. Achievements. In July 2004, IT4Youth was selected from among 2000 programs to win the 2004 Dubai International Award for Best Practices to Improve the Living Environment, co-sponsored by the UN Habitat and Dubai Municipality, which includes a cash prize of \$30,000. In response to the news, Her Majesty Queen Rania, a proponent of IT for young people, wrote in a letter of congratulations to the Welfare Association, "IT4Youth is a tremendous example of the power of international partnership between public, private and governmental organizations. Thanks to financial support from USAID...coupled with the Palestinian Authority's Ministry of Education, an important and bold step has been taken to reconstruct young lives." The following is a list of specific achievements of the IT4Youth Program:

a. School-based Component:

- 1. Computer labs in 14 secondary schools constructed or renovated;
- Computers, lab equipment and software provided to 44 secondary school computer labs:
- 3. 17,421 students with access to computers and training:
- 4. 50 IT teachers, engineers, and staff at the directorates of the Ministry of Education and Higher Education (MEHE) in Jenin and Nablus trained:
- 5. 280 non-IT teachers trained in basic computer usage and applications relevant to classroom use;
- IT curricula (FutureKids) for students at secondary schools developed;
 and
- 7. 14 schools linked to the Internet.

b. Community-based Component:

- 8. A Regional IT Center (RITC) constructed at Silet ad-Dhahr, Jenin:
- 9. 30 computers, lab equipment and software installed in the RITC:
- 10. Vocational training curricula created in the areas of administrative assistant and computer maintenance;
- 11. 57 youth received vocational training (39 females as administrative assistants and 18 males students graduated from computer maintenance courses);
- 12. 3 RITC staff and 11 youth steering committee members and mentors trained IT:
- 13. 11 members of the Joint Community Services Council trained in basic computer usage courses and how to sustain the RITC;
- 14. A recreational space for creative computer use by rural youth, ages 10-24 established:
- 15. 10 municipal staff trained in basic computer usage;
- 16. 180 adults trained in formal basic computer usage:
- 17. 422 adult and community members introduced to computer usage:
- 18. Awareness of parents and community members on the contribution of IT to the learning skills and employability of young people built within the community.
- 6. End-of-program Evaluation. The evaluation of the IT4Youth Program aimed at assessing the extent to which the Program achieved it stated objectives, outputs and

outcomes. To get a thorough and comprehensive analysis about the overall performance of the IT4Youth Program and to examine not only the extent to which the program has succeeded in implementing planned activities but the wider context in which the program was operating, a number of quantitative and qualitative research methodologies were employed for data gathering and synthesis, including:

a. Program Management, including:

- 1. A review of previous QSRs, previous evaluations and program plans and documents:
- 2. Interviews with Program COP and staff of the IT4Youth Program; and
- 3. An interview with the CTO-USAID.

b. School-based Programming, including:

- 1. Field visits/ observations in the 14 schools targeted by the program;
- 2. An achievement test in Publisher, Power point, Excel programs for random samples of students in grades 8, 9, & 10 of schools targeted by the program (270 students);
- 3. 14 Focus Group Discussions (FGDs) with students in grades 8, 9, & 10 (270 students);
- 4. A knowledge-based test for 14 IT teachers;
- 5. A FGD with the 14 IT teachers;
- 6. Two FGDs with 30 non-IT teachers; and
- 7. A FGD with 18 school principals and officials from the MEHE in Nablus and Jenin.
- 8. An in-depth interview with the Director of the Training Department and the Director of the IT Department at the MEHE.

c. Community-based Programming, including:

- 1. A detailed comparative analysis of three House Hold Surveys (HHS) (HHS1 was carried out in 2002, HHS2 in 2003 and HHS3 in 2004).
- 2. Field visits/ observations at the RITC;
- 3. Four FGDs with various community members in Sebastiya (11 male youth, 8 female youth, 5 mothers and 12 fathers).
- 4. Four FGDs with various community members in Jaba (10 male youth, 11 female youth, 7 mothers and 10 fathers).
- 5. One FGD with 16 members of the RITC.
- 6. One FGD with 10 members of the JCSC.
- 7. In-depth interview with 8 of graduates of the first and second A+ courses.
- 8. In-depth interview with 8 of graduates of the three secretary courses.
- 9. In-depth interview with 4 members of the YSC/ Mentors.
- 10. Interview with 2 trainers of the RITC.
- 11. Interviews with staff members of the RITC.

The evaluation was carried out by the two field external evaluators in cooperation with the IT4Youth program officers, two staff members of the RITC, and consultant of the FK program, and an IT coordinator at the MEHE. The participation of various

stakeholders in the evaluation process is seen as an important step to promote a collective learning process.

7. **Challenges** The following factors influenced program implementation:

a. Overall:

• The closure of Palestinian areas and the isolation of various towns and villages from one another was the single most important factor in hampering the implementation of many the program's planned activities. Often IT4Y staff were not able to reach their offices or leave their residences. It became difficult for members of the JCSC from the various villages to meet on regular basis. Monthly monitoring visits to schools by Futurekids staff became irregular. Movement of goods to the project very difficult at times. Training activities, fieldwork, and follow up of the program had to be stopped, or postponed, and then rescheduled again under difficult circumstances.

b. School-based Program:

- Some of the rooms in schools allocated by MEHE for conversion to computer labs were unsuitable—either too small and/or too narrow. It is better to construct new classrooms that are up to UNESCO standards.
- Because of unstable sources of electricity resulting in frequent power shortages, spikes in voltages, or low voltages, there were problems of damage with computers and monitors. Repairing equipment and coupled with closures caused much down time. Voltage regulators, and automatic power supplies (generators) should be installed to ensure an uninterrupted supply of electricity.
- Poor Internet connectivity (e.g.a.via land line) has been a significant constraint in helping students learn to use the Internet. The IT4Youth Program had originally envisioned satellite connections for each school but this was not permitted. DSL connections are not available either. The land line connection in each of the schools does not have the capacity to handle connectivity beyond the instructor's computer.
- Due to the internal regulations of the MOE, the IT4Youth Program faced a number of constraints related to lab utilization rates by students that were unanticipated, including (a) a limit to the number of instructional hours in IT for students: (b) a limit to the amount of time available for practice; (c) a limit when the labs were made available for student use before and after school.

c. Community-based Program:

• The delays in construction of the RITC in Silet ad-Dhahr postponed the implementation of a number of community and job training activities linked to it, thus limiting its outreach and effectiveness.

- The RITC is not accessible for those who are physically challenged thus limiting access to that segment of the population who could benefit from its services.
- **8. Lessons Learned.** The following are among the lessons learned by IYF in the implementation of the IT4Youth Program.

i. Relations with MEHE:

• Implementation of the program would have been more efficient: (1) if a steering committee involving all the relevant MEHE departments of the ministry (e.g., general education, curriculum department, etc) was established right from beginning; and (2) if a clear written MOU had been negotiated at the beginning laying out steps and what was to be achieved, roles and responsibilities of the various parties; and (3) how the MEHE could develop capacity of IT departments at education offices in municipalities, e.g. increase number of staff and their level of training.

ii. Construction:

- An overall building engineer should be incorporated as a member of the overall management team of the program to oversee local engineers in the renovation and construction of labs and to ensure consistency in design and quality.
- The use of local engineers and builders was very helpful, as time was saved in construction and in generating local support. Local construction standards were also raised due to the program imposing high standards.
- UNESCO is a good resource on computer lab space, design, and international standards on ratio of computers to students. The IT4Youth Program was able to convince MEHE to raise the numbers of computers per lab due to UNESCO standards.

iii. Equipment:

• Additional necessary equipment (, e.g. server, ClassNet, voltage regulators, etc) were not included in original design. There is a need for flexibility in the program to anticipate such technological advances.

• MOLG data on telephone connectivity, electricity, etc. and other infrastructure is not dependable and thus it is necessary to verify such data on site.

iv. Curricula:

- In working with the MEHE, it is important to agree in writing with the MEHE the
 estimated time parameters needed to implement the curriculum effectively: the roles
 and responsibilities of the MEHE, both at the national and regional levels; and the
 amount of time students may spend in class and in practice. It is also important to
 establish enough time to build the capacity of the MEHE in IT.
- Perhaps it might have been more effective to refine and further develop an already existing MEHE computer curriculum rather than negotiating a new curriculum.

v. Training of IT teachers:

- The level of IT knowledge and skills of IT teachers appointed by the MEHE was very disparate. It was very hard to design training to deal with these different knowledge and skill levels. MEHE should appoint teachers with minimum levels of IT skills to the program.
- IT Teachers learned how to carry out routine higher level maintenance of the
 computer labs. Delegating this responsibility to them and training them how to do it
 increases their self-confidence. The training given to the IT teachers has become the
 national standard given to all IT teachers throughout the country.

vi. Training of Non-IT teachers:

- Non-IT teachers are now being able to use the labs on their own because MEHE is confident in their ability due to the training they have received.
- It would be useful to evaluate the level of learning between students that have learned non-IT subjects with and without IT input and, based on the results, systematize the use of IT in non-IT subjects. This would help the case for motivating more non-IT teachers to incorporate IT into their teaching methods.

vii. Lab utilization rates:

IT4Youth staff believe that utilization would be increased if the MEHE would
permit more after-school activities in the labs, the labs were opened to the
community, and the labs could be used for classes by non-IT teachers.

viii. Maintenance of equipment/labs:

- There is a need to outsource the maintenance computer equipment to local service providers who have better access to the labs and face fewer constraints due to closures. It is also best to have an extended warranty on the equipment.
- Capacity building of MEHE IT teachers in how to carry out routine maintenance of hardware and software should be started at the beginning of the program.

ix. Construction of the RITC:

• An effective way to increase community participation in a program is to invite community input on the building design.